AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

1. (Currently Amended) A drug delivery device comprising:

a catheter or syringe having a distal portion, and

a needle attached to the distal portion, the needle comprising during use:

a shaft having a distal end defining a distal opening and having a longitudinal axis extending through the distal opening,

the distal opening having a projected area that is smaller than a cross-sectional area of the opening ~~a section~~ of the shaft proximal to the distal end of the shaft,

~~wherein the distal-most end is a curvilinear blunt tip~~ the distal end comprising opposing first and second surfaces, wherein the first surface blocks a majority of the distal opening.

2. (Currently Amended) The needle of claim 1, wherein ~~the distal end comprises opposing first and second surfaces and~~ the first surface is indented towards the second surface to form a concavity on an outer portion of the first surface.

3. (Original) The needle of claim 1, wherein the distal end of the shaft comprises at least one port on a side surface thereof.

4. (Canceled)

5. (Original) The needle of claim 1, wherein the distal end of the shaft is tapered.

6-12. (Canceled)

13. (Previously Presented) A method of delivering a therapeutic agent to a target site of a body comprising:

providing a drug delivery device comprising:

a non-coring needle having a distal end defining a distal opening and having a longitudinal axis extending through the distal opening,

the distal end comprising a first surface indented towards a second surface to form a concavity on an outer portion of the first surface,

the second surface being parallel to the longitudinal axis of the shaft,

the distal opening having a projected area that is smaller than a cross-sectional area of a section of the shaft proximal to the distal end of the shaft;

puncturing a body tissue with the non-coring needle tip; and

delivering the therapeutic agent through the non-coring needle to a target site of a body.

14. (Canceled)

15. (Original) The method of claim 13, wherein the target site is selected from a group consisting of the heart, lung, brain, liver, skeletal muscle, smooth muscle, kidney, bladder, intestines, stomach, pancreas, ovary, prostate and cartilage.

16. (Original) The method of claim 13, wherein delivering the therapeutic agent comprises directly delivering the therapeutic agent to the target site.

17. (Previously Presented) A method of accessing a drug delivery port comprising:

providing a drug delivery device comprising:

a non-coring needle having a distal end defining a distal opening and having a longitudinal axis extending through the distal opening,

the distal end comprising a first surface indented towards a second surface to form a concavity on an outer portion of the first surface,

the second surface being parallel to the longitudinal axis of the shaft,

the distal opening having a projected area that is smaller than a cross-sectional area of a section of the shaft proximal to the distal end of the shaft; and

inserting the needle of the drug delivery device into a drug delivery port to access the drug delivery port.

18. (Original) The method of claim 17, wherein accessing the drug delivery port comprises introducing a therapeutic agent through the needle into the drug delivery port.

19. (Canceled)

20. (Original) The method of claim 17, wherein the drug delivery port comprises a septum, the needle of the drug delivery device piercing the septum to access the drug delivery port.

21. (Previously Presented) The method of claim 13, wherein the target site is a spinal column.

22. (Previously Presented) A method of collecting a fluid sample from a body comprising:

providing a drug delivery device comprising:

a non-coring needle having a distal end defining a distal opening and having a longitudinal axis extending through the distal opening,

the distal end comprising a first surface indented towards a second surface to form a concavity on an outer portion of the first surface,

the second surface being parallel to the longitudinal axis of the shaft,

the distal opening having a projected area that is smaller than a cross-sectional area of a section of the shaft proximal to the distal end of the shaft;

puncturing a body tissue with the non-coring needle;

inserting the needle into a fluid containment site of a body; and

creating a vacuum in the drug delivery device to collect a fluid sample from the fluid containment site of the body.

23. (Original) The method of claim 22, wherein the fluid sample comprises blood, amniotic fluid, serous fluid, or cerebrospinal fluid.

24-32. (Canceled)

33. (Previously Presented) The needle of claim 34, wherein the second surface is parallel to the longitudinal axis of the shaft.

34. (Currently Amended) A drug delivery device comprising:

a catheter or syringe having a distal portion, and

a needle attached to the distal portion, the needle comprising during use:

a shaft having a distal end comprising a first surface indented towards a second surface to define a distal opening having a U-shape when viewed along the longitudinal axis from the front of the distal end,

the shaft having a longitudinal axis extending through the distal opening,

the distal opening having a projected area that is smaller than a cross-sectional area of a section of the shaft proximal to the distal end of the shaft.

35. (Currently Amended) The ~~A~~ drug delivery device of claim 34 ~~comprising:~~

~~a catheter or syringe having a distal portion,~~

~~a needle attached to the distal portion, the needle comprising during use:~~

~~a shaft having a distal end comprising a first surface indented towards a second surface to define a discontinuous distal opening, thereby forming~~ further comprising a concavity on an outer portion of the first surface[[,]]

~~said distal opening having a generally U-shaped configuration when viewed along the longitudinal axis from the distal end,~~

~~the shaft having a longitudinal axis extending through the distal opening,~~

~~the distal opening having a cross-sectional area that is smaller than a cross-sectional area of a section of the shaft proximal to the distal end of the shaft~~.

36-38. (Cancelled)

39. (Previously Presented) The needle of claim 34, wherein the distalmost end is a curvilinear blunt tip.

40. (Previously Presented) The needle of claim 35, wherein the distalmost end is a curvilinear blunt tip.

41. (Currently Amended) The needle of claim 1 [[36]], wherein the distalmost end is a curvilinear blunt tip.

42. (Previously Presented) The needle of claim 34, wherein the distal end of the shaft comprises at least one port on a side surface thereof.

43. (Previously Presented) The needle of claim 35, wherein the distal end of the shaft comprises at least one port on a side surface thereof.

44. (Cancelled)

45. (Previously Presented) The method of claim 16, wherein the target site is the heart.

46. (Previously Presented) The method of claim 16, wherein the target site is the myocardium.

47. (Currently Amended) A drug delivery device comprising:

a catheter or syringe having a distal portion, and

a needle attached to the distal portion, the needle comprising during use:

a shaft having a distal end comprising a first surface indented towards a second surface to define a distal opening, said distal opening being discontinuous and having a substantial U-shape when viewed along the longitudinal axis from the front of the distal end, wherein a bottom of the U-shape is closed,

the shaft having a longitudinal axis extending through the distal opening,

the distal opening having a projected area that is smaller than a cross-sectional area of a section of the shaft proximal to the distal end of the shaft.

~~The drug delivery of claim 34, wherein the bottom of the U-shaped opening is closed, forming a discontinuous opening.~~

48. (Cancelled)

49. (Currently Amended) The needle of claim 35 [[36]], wherein the center of the concavity of the first surface is in contact with the second surface.